



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,081	08/30/2006	Keiji Nishimoto	50478-3800	7834
53044 7590 06/23/2008 SNELL & WILMER L.L.P. (Matsushita) 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626				
EXAMINER				
TRUONG, BAO Q				
ART UNIT		PAPER NUMBER		
2875				
MAIL DATE		DELIVERY MODE		
06/23/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,081

Applicant(s)

NISHIMOTO ET AL.

Examiner

BAO Q. TRUONG

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-85/86)
Paper No(s)/Mail Date 8/30/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Inventor's Patent Application
6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Election/Restrictions

2. Applicant's election without traverse of Group I including claims 1-14 in the reply filed on 5/29/2008 is acknowledged.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimizu et al. [US 2003/0189829 A1].

Regarding claim 1, Shimizu et al. discloses an LED mounting module, comprising: a substrate [1, or 1c and 1e]; and a reflecting member [3] made of a resin material and having a reflecting hole [3a] in a position corresponding to an LED

device [2] which is to be mounted on one of main surfaces of the substrate [1], wherein the substrate and the reflecting member are directly adhered to each other in such a state that the main surface of the substrate is in contact with one of main surfaces of the reflecting member (figures 4-5).

Regarding claim 2, Shimizu et al. discloses the substrate [1] includes an insulation board [1c, 1e] made of a resin material, and a wiring pattern [12a, 14a, 1d] on one of main surfaces of the insulation board [1c, 1e], and the resin material forming the insulation board contains a same resin as the resin material forming the reflecting member (figure 5).

Regarding claim 3, Shimizu et al. discloses the resin material is a thermosetting resin material principally containing an epoxy resin (paragraph 0186).

Regarding claim 4, Shimizu et al. discloses the resin material is a thermoplastic resin material principally containing a resin selected from a group consisting of a polyphthalamide resin, a liquid crystal polymer, a polyphenylene sulfide resin, and a polybutylene terephthalate resin [phenol, cyanate] (paragraph 0186).

Regarding claim 5, Shimizu et al. discloses the resin material contains one or more fillers to improve reflection efficiency (paragraph 0124).

Regarding claim 6, Shimizu et al. discloses the fillers include at least one of TiO.sub.2, SiO.sub.2, Al.sub.2O.sub.3, and BaSO.sub.4. (paragraph 0124).

Regarding claim 7, Shimizu et al. discloses the resin material forming the insulation board contains at least one of Al.sub.2O.sub.3, AlN, SiO.sub.2, and SiC (paragraph 0123, 0124).

Regarding claims 8 and 9, Shimizu et al. discloses a metal board [1b] is provided on the other main surface of the substrate, and the resin material forming the insulation board is a composite material containing an inorganic filler and a thermosetting resin material (figure 5, paragraph 0123, 0124, 0126).

Regarding claim 10, Shimizu et al. discloses a depression [4] is formed in a part of the substrate at which the reflecting member is adhered, and the depression is filled with the resin material forming the reflecting member (figure 5, paragraph 0147).

Regarding claim 11, Shimizu et al. discloses the LED device is one of a plurality of LED devices that are to be mounted on the main surface of the substrate, and the reflecting hole is one of a plurality of reflecting holes formed in the reflecting member in correspondence with the plurality of LED devices (figure 4).

Regarding claim 12, Shimizu et al. discloses the substrate includes an insulation board made of a ceramic material, and a wiring pattern on one of main surfaces of the insulation board (figure 5, paragraph 126).

Regarding claim 13, Shimizu et al. discloses the ceramic material contains at least one of Al.sub.2O.sub.3 , AlN , SiO.sub.2 , and SiC (paragraph 0123, 0124, 0126).

Regarding claim 14, Shimizu et al. discloses an LED module comprising: the LED mounting module defined in claim 1; and an LED device mounted on the LED mounting module (figures 3-5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BAO Q. TRUONG whose telephone number is (571) 272-2383. The examiner can normally be reached on Monday-Friday (8:00 AM - 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bao Q. Truong/
Primary Examiner, Art Unit 2875